

WHAT IS CLAIMED IS:

1                   1.       A method for securing information associated with a content  
2 receiver that is part of a conditional access system, the method comprising steps of:  
3                   selecting an object for monitoring;  
4                   independently determining when the object should encounter a checkpoint  
5 that triggers at least one of authentication and authorization;  
6                   independently monitoring that at least one of authentication and  
7 authorization is performed; and  
8                   sending information regarding the monitoring away from the content  
9 receiver.

1                   2.       The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 1, further  
3 comprising a step of preventing execution of the object in response to the monitoring  
4 step.

1                   3.       The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 1, wherein:  
3                   the determining step comprises a step of determining with an access  
4 control processor when the object should encounter the checkpoint, and  
5                   the access control processor operates independent of a controller.

1                   4.       The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 1, wherein:  
3                   the monitoring step comprises a step of monitoring with an access control  
4 processor that at least one of authentication and authorization is performed, and  
5                   the access control processor operates independent of a controller.

1                   5.       The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 1, wherein the  
3 sending step comprises a step of sending information from an access control processor.

1                   6.       The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 1, further  
3 comprising at least one of the following steps of:

4 changing authorization for the object;  
5 changing authorization for a functional unit other than the object;  
6 deleting the object from volatile memory;  
7 deleting the object from non-volatile memory;  
8 deleting the object from the content receiver; and  
9 stopping execution of the object.

1 7. The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 1, further  
3 comprising steps of:  
4 defining a period that the content receiver should perform the sending step  
5 within; and  
6 determining from a remote location if the content receiver has performed  
7 the sending step.

1 8. A method for securing information associated with a content  
2 receiver that is part of a conditional access system, the method comprising steps of:  
3 selecting an object for monitoring;  
4 determining when the object should encounter a checkpoint that triggers at  
5 least one of authentication and authorization;  
6 independently monitoring that at least one of authentication and  
7 authorization is performed; and  
8 preventing execution of the object in response to the monitoring step.

1 9. The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 8, further  
3 comprising a step of sending monitoring information away from the content receiver to a  
4 headend.

1 10. The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 8, wherein:  
3 the determining step comprises a step of determining with an access  
4 control processor when the object should encounter the checkpoint, and  
5 the access control processor operates independent of a controller.

1                    11.     The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 8, wherein:  
3                    the monitoring step comprises a step of monitoring with an access control  
4 processor that at least one of authentication and authorization is performed, and  
5                    the access control processor operates independent of a controller.

1                    12.     The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 8, wherein the  
3 sending step comprises a step of sending information from an access control processor.

1                    13.     The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 8, further  
3 comprising steps of:  
4                    defining a period that the content receiver should perform the sending step  
5 within; and  
6                    determining from a remote location if the content receiver has performed  
7 the sending step.

1                    14.     The method for securing information associated with the content  
2 receiver that is part of the conditional access system as recited in claim 8, further  
3 comprising at least one of the following steps of:  
4                    changing authorization for the object;  
5                    changing authorization for a functional unit other than the object;  
6                    deleting the object from volatile memory;  
7                    deleting the object from non-volatile memory; and  
8                    deleting the object from the content receiver.

1                    15.     A conditional access system for remotely controlling functional  
2 units in a content receiver, the conditional access system comprising:  
3                    a monitoring computer located remotely from the content receiver;  
4                    a functional unit within the content receiver;  
5                    a distribution network coupling the monitoring computer to the content  
6 receiver;  
7                    a general purpose processor within the content receiver; and

an access control processor that monitors program execution on the  
general purpose processor and reports security anomalies to the monitoring computer.

16. The conditional access system for remotely controlling functional  
units in the content receiver as recited in claim 15, wherein a headend comprises the  
monitoring computer.

17. The conditional access system for remotely controlling functional  
units in the content receiver as recited in claim 15, wherein functional unit is chosen from  
a group consisting of a resource and an object.

18. The conditional access system for remotely controlling functional  
units in the content receiver as recited in claim 15, further comprising a plurality of  
content receivers, wherein each of the plurality of receivers comprises: the functional  
unit, a general purpose processor and the access control processor.